

Why You Should Use The Auto-Spray.



BECAUSE a boy can operate them.
BECAUSE they will cover ten times more area in a day than any force pump which requires the operator to be constantly pumping.
BECAUSE they save material.
BECAUSE they will save their cost in a few days' use figuring a man's time at \$1 per day.
BECAUSE, when in use there is no slopping or waste, and no danger of getting a splash in the face with some poisonous mixture, as is the case with the old style sprayers.

BECAUSE they are warranted.
BECAUSE they are the only machines shipped on approval.
BECAUSE they are superior in construction, material and workmanship.
BECAUSE they have been triumphant in every contest with other machines.

Specifications.

This sprayer has nozzle, stop-cock, and fittings turned from brass, with deep cut threads, three-ply rubber hose, the pump and valves are entirely of brass where they come in contact with the solution; all cast-iron parts are malleable iron, the carrying strap is made of eight-ply halter web. It is fitted with our improved valve and take-out and put-in sleeve which prevents damage or accident to the plunger and packing.

The Cylinder is made with our Celebrated Lock Seam, and soldered inside and out so that all parts are equally strong.

A BOY CAN DO A MAN'S WORK.

The Sprayer is light and being carried by a shoulder strap a boy can carry it with ease and can cover twice as much ground in a day as can be covered with the old style Sprayers which require the operator to be constantly pumping in order to do the spraying.



FOR spraying Grape Vines, Potatoes, Shrubs, etc., this sprayer will do the work of three ordinary sprayers as the operator carries the sprayer over his shoulder and as soon as one bush or vine is sprayed moves on to another, whereas the ordinary sprayer has to be set on the ground and the operator has to do the pumping for each separate bush. For greenhouses, either for giving plants a shower bath or applying insecticides you need this sprayer.

FOR ORCHARDS.

It answers every purpose of a barrel pump while one man can do the work, which with ordinary barrel sprayers requires three men.

USES.

For Spraying insecticides and Fungicides upon all Plants and Tree Life.
 As a fire extinguisher.
 For spraying carbolic acid to prevent hog cholera.
 For spraying insecticides and whitewash in hen-houses.
 For spraying insecticides in hospitals and other places to prevent the spread of contagious diseases, such as yellow fever, typhoid fever, etc.
 For spraying nicotine and other insecticides in greenhouses.
 For spraying cattle.
 As a bicycle pump.
 For swarming bees.
 For washing windows and wagons.
 For cupping.
 As a sprinkler for plants and flowers.
 For sweeping floors, taking the place of wet sawdust.

THE AUTO-SPRAY TORCH

Our torch cannot be used with any other pump. It is marvellously effective in burning worms and nests, and is the only torch that has ever been used successfully. Most torches simply warm up the worms and make them more active. The torch burns kerosene oil vaporized with oxygen of the air, and is so intensely hot that a single blast is sufficient to destroy a nest of worms.



It is used by simply screwing to the end of the extension pipe, and is operated by opening and closing the stop-cock attached to the rubber hose. By simply opening the cock a blast of air is thrown through the flame, which is then carried to a height of four feet six inches. As the flame is entirely controlled by the operator, there is no danger of damage to any part of the tree except that which is infected with caterpillars.

EXTENSION PIPES.



These pipes are necessary in spraying tall trees. With three lengths of pipe and our new spraying attachment, a spray can be thrown to the height of 26 feet. These pipes are all made in lengths of two feet for convenience in shipping with our machines.



ELBOW EXTENSION—Our elbow extension is used for low down work, and reaching the underside of leaves on grape vines, etc.

BICYCLE PUMP NIPPLE—This is a very useful connection, and much cheaper than a regular bicycle pump. It is also much more effective and easier of operation.

A World Wide Challenge

\$100 Cash for One Day's Work.

\$50 Cash for One-Half Day's Work.



The accompanying cut shows the Sprayer in operation in a potato field and we make the above unqualified challenge offer to all comers, for any hand sprayer which will cover more ground more thoroughly than OUR SPRAYER either for a whole day or a half day's work. Our endeavor is to offer the BEST TO BE HAD, and if any one thinks he has any better, or as good, we want to hear from him.

PRICES

"Auto-Spray" Galvanized Steel Tank.....	\$6.00
"Auto-Spray" Brass Tank.....	8.00
With Auto-Pop instead of Stop Cock, (extra).....	1.00

EXTRAS

Extension Pipes, 2 feet lengths, Galvanized Steel, Brass Ends.....	\$0 40
Extension Pipes, 2 feet lengths, Solid Brass.....	50
Elbow Connections, Solid Brass.....	45
"Auto Spray" Torch.....	1 00
Bicycle Pump Fitting.....	35
Auto-Pop and Fittings, complete.....	2 00
Strainer, Brass.....	1 00

REPAIRS

Hose, per length, with wire coil.. \$0 30	Pump Valve, complete..... \$0 20
Nozzle, without Caps..... 30	Leather Washer, each..... 05
Caps, each..... 10	Screw and Washer for Stop Cock..... 10

Buchanan Nursery Co.

ST. CHARLES, MAN.

When to Spray and What to Use.

Every man should know what he is spraying for and employ means to attain the desired result. Be ready and begin early. It is easier to keep the enemy away than to drive him away. When fighting insects it is necessary to know if the pest chews its food for if not, contact insecticides or other means must be employed. Sucking insects as a rule, produce a withering or discoloration of small areas and sometimes curling of the leaves; such attacks must be checked by the use of contact insecticides.

Biting or chewing insects devour portions of the plant and the poison, in order to be effective, must be applied where it will be eaten. If this is done early in the season, most excellent results may be obtained. Sucking insects usually succumb much more quickly than older ones.

It must be remembered that Insects and Fungous diseases are of an entirely different nature. The two most important Fungicides are Ammoniacal Carbonate of Copper and Bordeaux Mixture.

APPLES—(Scab, Codling Moth, Bud Moth). 1st application: Spray before buds start, using copper sulphate solution. 2nd application: Just before blossoms open, bordeaux. For Bud Moth, Paris green when buds open. 3rd application: Within a week after blossoms have fallen, bordeaux and Paris green. 4th application: Eight to twelve days later, bordeaux. 5th application: Ten to fourteen days later, bordeaux.

CABBAGE—(Worm, Aphis). 1st application: When worms first appear, kerosene emulsion. 2nd application: Repeat in seven to ten days if plants are not heading. 3rd application: If worms reappear, repeat if not heading. 4th application: After heads form use Saltpetre for worms, a teaspoonful to a gallon of water. 5th application: When plants are small Paris green may be used to check worms.

CARNATION—(Rust and other fungous diseases, Red Spider). 1st application: When rust is first noticed, bordeaux. For Red Spider, kerosene emulsion. 2nd application: For rust, repeat first in ten to fourteen days. For Red Spider, repeat in three to four days. 3rd application: Repeat second, using ammoniacal carbonate of copper if plants are in bloom. 4th application: Repeat second if necessary.

CHERRY—(Rot, Aphis, Slug and Curculio). 1st application: As buds are breaking, bordeaux. When aphis appear, kerosene emulsion. 2nd application: When fruit has set, bordeaux. If slugs appear dust leaves with air-slacked lime. 3rd application: Ten to fourteen days later, if signs of rot appear, bordeaux. 4th application: Ten to fourteen days later, ammoniacal copper carbonate.

CURRENT—(Mildew, Worms). 1st application: At first sight of worms, Paris green. 2nd application: If worms reappear repeat. If leaves mildew, bordeaux. 3rd application: If worms still trouble, hellebore.

GOOSEBERRY—(Mildew, Worms). 1st application: When leaves expand, bordeaux. For worms, Paris green. 2nd application: Ten to fourteen days later, repeat. 3rd application: Ten to fourteen days later, ammoniacal copper carbonate. 4th application: Repeat in ten to fourteen days if necessary. 5th application: If mildew persists after crop is gathered, bordeaux.

GRAPE—(Fungous Diseases, Flea Beetle). 1st application: Before buds burst, copper sulphate solution. For flea beetle, Paris green. 2nd application: When leaves are half grown, bordeaux. Paris green for larvae of flea beetle. 3rd application: As soon as fruit has set, bordeaux. 4th application: Ten to fourteen days later if any disease appears, bordeaux. 5th application: If necessary ammoniacal copper carbonate.

PEACH, APRICOT—1st application: Before buds swell, copper sulphate solution. 2nd application: As soon as the fruit has set, bordeaux. 3rd application: Ten to twelve days later, repeat. 4th application: When fruit is nearly grown, ammoniacal copper carbonate. 5th application: Repeat last if necessary in five to ten days.

PEAR—(Codling moth, Psylla Leaf Blight, Scab). 1st application: Before buds start, copper sulphate solution. 2nd application: Just before blossoms open, bordeaux. Kerosene emulsion for psylla when leaves open. 3rd application: After blossoms have fallen, bordeaux and Paris green. 4th application: Ten to twelve days later, repeat if necessary.

PLUM—(Rot, Fungous Growths, Curculio). 1st application: As buds start, copper sulphate solution. 2nd application: When fruit has set, bordeaux, Paris green. Begin to jar trees for curculio. 3rd application: Ten to twelve days later, repeat. 4th application: Ten to twenty-three days later, bordeaux, 5th application: Two to three weeks before plums ripen, bordeaux ammoniacal copper carbonate.

POTATO—(Beetles, Blight). (Soak seed for scab in corrosive sublimate solution [2 oz. to 16 gals. of water] for 90 minutes. 1st application: When beetles first appear, Paris green. 2nd application: When vines are two-thirds grown, bordeaux. Paris green for beetles if necessary. 3rd application: Ten to fifteen days later repeat if necessary. 4th application: Ten to fifteen days later, bordeaux if necessary.

RASPBERRY, BLACKBERRY—(Anthracnose, Rust). 1st application: Before buds break, copper sulphate solution. 2nd application: When new canes are one foot high, bordeaux mixture. 3rd application: During summer if rust appears, bordeaux. 4th application: After crop is gathered remove old canes and spray with bordeaux.

ROSE—(Mildew, Black Spot, Red Spider, Aphis). 1st application: Mildew, keep heating pipes painted with equal parts lime and sulphur mixed with water to a paste. 2nd application: Black spot, spray plants once a week with weak copper sulphate. 3rd application: Red Spider, kerosene emulsion to under side of foliage. 4th application: Aphis, kerosene emulsion. 5th application: Solution should be very dilute as rose foliage is easily injured.

STRAWBERRY—(Rust)—1st application: Just before blossoms open, bordeaux. 2nd application: As first fruits are setting bordeaux. 3rd application: When first fruits are ripening, ammoniacal copper carbonate. 4th application: When last of fruit is harvested, bordeaux.

TOMATO—(Rot, Blight). 1st application: At first appearance of rot or blight, bordeaux. 2nd application: Repeat if diseases are not checked.

CATTLE—For Lice, Fleas, Ticks or Horn Fly use Kerosene emulsion.

Always Ready Fire Extinguisher.

With every machine we give a recipe for making a solution which will immediately extinguish fire as soon as applied. It does virtually the same work as the fluid applied by the high-priced chemical engines used in cities. A very little of the solution will extinguish a big fire, as by throwing it beneath the blaze the heat creates a gas and the fire cannot burn for want of air. Just mix the solution (it will keep for years), load your Automatic Sprayer and set it away. In case of fire just turn on the stream and the fire is out. It's as Good as an Insurance Policy, and Cheaper. Isn't This Worth Considering?

Spraying Mixtures.

Kerosene Emulsion

For sucking insects, cabbage worms and insects with soft bodies. Coal Oil, 2 gal.; boiling water, 1 gal.; hard soap, $\frac{1}{2}$ lb. Churn thoroughly. Dilute 5 to 20 times before applying.

Paris Green

For insects which chew. Paris green, 1 lb.; water 200 gal. When used on fruit trees 1 lb. of quicklime should be added. Paris green and Bordeaux can be applied together if desired.

Copper Sulphate Solution

For fungous diseases. Copper sulphate, 1 lb.; water 15 to 25 gal. Is ready for use as soon as dissolved. This should never be applied to foliage, but must be used before buds break.

Bordeaux Mixture

For rot, moulds, mildew and fungous diseases. Copper Sulphate (Blue Vitriol) 6 lbs. quicklime (good stone lime) 4 lbs.; water 50 gal. Dissolve the Copper Sulphate by putting in a coarse cloth and hanging in an earthen or wooden vessel containing 4 to 6 gallons of water. Slack the lime in an equal amount of water, then mix the two and add enough water to make 50 gallons.

Ammoniacal Copper Carbonate

Copper Carbonate 5 oz.; Ammonia (26°) 3 pints; water 45 gallons. Make a paste of the Copper Carbonate with a little water, dilute the ammonia with 10 to 12 quarts of water, add the paste to the diluted Ammonia and stir until dissolved, then add enough water to make 45 gallons. This mixture loses strength on standing.

Hellebore

For insects which chew. Fresh white Hellebore, 1 oz.; water 3 gallons. This poison is not so energetic as the Paris green and may be used a short time before the sprayed portions mature.

Fire Extinguisher

Muriate of ammonia, 1 lb.; Chloride of potash, 1 lb.; Salt, 5 lbs. Pulverize and dissolve the above in 3 gallons of water. Next dissolve two pounds of Bi-Carbonate of Soda in two gallons of water. Mix the two solutions together and let it stand over night. A very little of this solution will extinguish a big blaze, for by throwing it beneath the blaze, the heat creates a gas and the fire cannot burn for want of air. One half-pound of Baking Soda added to two gallons of water will also do effective work at a fire.

Disinfectants

For contagious diseases and other purposes.

Carbolic Acid—in the proportion of a tablespoonful of the acid to a pint of water; or
Formaldehyde—a 40 per cent. solution.

TESTIMONIALS

New Dundee, Ont.

In regard to the Auto-Spray sold me by your local Agent I must say that it has pleased me and works just right. I have given machine a thorough trial and find it works perfectly for spraying trees, potatoes, poultry houses and for spraying stock. It is just what I have been looking for.

C. C. ROSENBERGER.

Berlin, Ont.

I would hereby inform you that I bought an Auto-Spray from your agent, and that I am very well pleased with it. It is excellent for spraying poultry houses, potato vines, fruit trees, shrubs, and for washing buggies, windows, etc.

JOHN HEIST.

The Spray Pump works capital.

Chatsworth, Ont. W. G. WILSON.

Chester, N. S.

Re the Auto-Spray I can say it is the best machine of its kind I have ever seen and I think every man that wants to have any success in raising fruit or other crop must spray, and to do so I have not been able to find a better means of applying it than with the Auto-Spray.

COTTNAM SMITH.

Orono, Ont.

People say the Auto-Spray is the best they have seen. I used the Spray on potatoes and did good work in a little time. Would not be without it.

E. DAVEY.

I think it is the best machine ever put on the market. You should have a place in Montreal.

St. Paul, Montreal. S. AUBIN.

Trenton, Ont.

The Sprayers are taking well and will sell another season as soon as the farmers come to see the uses they can make of them.

C. O. SIMPSON.

Peterboro', Ont.

I am well pleased with the Auto-Spray and recommend it to all.

WILLIAM ANDERSON.

Tay, Ont.

The Auto-Sprays speak for themselves. Those who bought from me say they would not be without them.

D. K. DURNFORD.

Walkerville, Ont.

The Auto-Spray is all I expected it to be. Have shown it to a number of persons and all say it is the most practical machine on the market.

T. M. LEE.

Strasburg, Ont.

I have very much pleasure in recommending your Auto-Spray to anyone needing one and it can be used for so many purposes that everybody needs one.

JOHN AMOS.

Honeywood, Ont.

In regard to the Spray Pump sold me by your agent, it is just the thing for the potato bugs.

ROBT. TWEEDY.

Strasburg, Ont.

The Auto-Spray which I bought from your agent has given every satisfaction.

WM. ORR.

Berlin, Ont.

The Automatic Sprayer which I got from your agent last season has proved entirely satisfactory and I can heartily recommend it.

WM. SHAFER.

TESTIMONIALS.

Re Auto-Spray I must say that the Auto-Spray is a grand machine for spraying fruit trees, potatoes, and for putting fly poison on cattle.

Camilla, Ont.
GEO. W. RAYFIELD.

I have used one of your Auto-Sprays which has proved in every way satisfactory and I take pleasure in recommending it to anyone requiring a convenient hand spray-motor.

Burford, Ont.
J. R. BRETHOUR.

In regard to the Spray Pump sold me by your agent, must say I have found it the very thing I wanted in my hog pen. I can follow a hog or a bunch of hogs all around the pen and saturate them whenever desired. Have also used it a lot for spraying inside of buildings. If there are any uses I have failed to put your Auto-Spray to, my neighbors have made up the deficiency, and I only wish you would supply every mother's son of them with one so that I could keep mine at home, especially about potato bug time.

Burford, Ont.
C. F. SAUNDERS.

The Sprayer satisfies me and does better work than I expected. It is a very handy sprayer and I would not be without it. I use it mostly for spraying my chicken houses but intend to spray my fruit trees with it this winter, for which it is well adapted.

Victoria, B. C.
JAS. YOUNG.

The Auto-Spray I got from you last spring is all you represented it to be. I have used it for spraying cattle, potatoes, and for washing feet and legs of my horses, washing windows and other purposes, and I am well pleased with it.

Pictou, N. S.
JNO. A. MEAGER.

I have used the Auto-Spray for spraying trees and am using it every day spraying cattle with Horse Fly Oil.

Tavistock, Ont.
WM. H. YUNG.

I got an Auto-Spray that I purchased from your agent and it is the handiest thing I have had on my place in the shape of a sprayer. Just as I got it I had a fine steer get his hind leg hurt in the pasture field somehow and it was swollen terribly and I just put the stream nozzle on and showered it three times a day until I have it nearly all reduced.

Bronte, Ont.
W. H. SPEIRS.

I purchased one of your Auto-Sprays last year from your agent and have used it for a variety of purposes such as spraying plum trees, chicken houses, potato vines, etc., especially the latter, for which it is invaluable. For anybody wanting a small and yet efficient sprayer, I would recommend the Auto very highly.

Burford, Ont.
A. D. LUARD.

The parties to whom I sold the Auto-Spray last season are all perfectly satisfied.

Oxford Co., Ont.
R. VANSICKLE, Agent.

In reference to your Auto-Spray which I bought last season may say that it has given me the best of satisfaction. Formerly when delivering hogs for market I always in hot weather took a pail with me and when they got too hot I would throw water on them which I took from the roadside or from some farmer's pump. Now when I leave home I simply fill the machine with water, pump it up and take it with me. As soon as they begin puffing from the heat I turn the hose on and the puffing stops, and repeat this when necessary. There is no carrying of water, wasting time, etc., as I would let the horses walk along. One loading is sufficient for a long distance, and the hogs are much more comfortable than in the old way. In the pen I simply turn the hose on them in the hot weather, and they seem to enjoy it immensely.

Sebringville, Ont.
GEO. P. SEEBACH.

I bought one of your Sprayers last spring from your agent here, which has given me perfect satisfaction.

Grimshy, Ont.
JAS. MARLOW.

I am well pleased with the Auto-Spray and the demand for them is far beyond last year. I have not come across a man yet who does not think they are the best he ever saw.

Durham Co., Ont.
CHAS. GOYNE.

I can safely say that your Auto-Spray is the best I ever saw or heard tell of. I can Paris green my potatoes now with four pails of water with ease, when before it would take sixteen pails and constant running.

Darlington, Ont.
GEO. CORNISH.

Your Sprayers are the best I ever saw because of their simplicity in operation and cheapness and I can highly recommend them to anyone who is in need of one.

Courtoice, Ont.
HARRY PHAIR.

Your Auto-Spray is a treasure and I would not let it go for three times the price of it, if I could not replace it.

Durham Co., Ont.
MOSES LYMER.

Your Automatic Compressed Air Sprayers are a great improvement on the old time sprayers which meant constant pumping. I have laid the old one aside and my boy does all my spraying now.

Courtoice, Ont.
JAS. SULLEY.

In regard to the Spray Pump sold me by your agent, it is just the thing for the potato bugs.

Honeywood, Ont.
THOS. WALLACE.

I like the Auto-Spray fine.

Embro, Ont.
THOMAS PARKER.

I like the Auto-Spray first rate. It is the best I have ever seen and I believe it will be the one that will lead.

Belyas Cove, N. B.
J. C. WETMORE.

We are very well pleased with the Auto-Spray, it is all you represent it to be. All the parts are well made, the spraying nozzle being both very simple in construction and effective in operation.

Mt. Lehman, B. C.
R. & J. OWEN.

The Auto-Spray I purchased from you last spring is everything you represented it to be. I have used it spraying trees, potatoes, washing wagons, windows, etc., and find it does its work well and can recommend it to any person in want of a handy and useful sprayer.

Pictou, N. S.
A. MCKENNA.

The Auto-Spray I purchased from you last season is all right. It does all it is represented to do and I am well satisfied with it.

Pictou, N. S.
ALEXANDER SMITH.

The Auto-Spray I purchased from you last spring I find first-class and everything it is represented to be by you.

Pictou, N. S.
JAS. F. STILES.

The Auto-Spray I purchased from you gives good satisfaction and is just as you represented it.

Pictou, N. S.
J. H. MACKENZIE.

The Auto-Spray purchased from you last spring is first-class and does all you represented it to do. I find it splendid for potatoes.

Pictou, N. S.
ROD INNIS.

The Automatic Sprayer which I purchased from you this summer was entirely satisfactory in every particular and I would recommend it to any one for all kinds of spraying.

Meaford, Ont.
H. J. ELLIS.

I can only say that the Auto-Spray is worth a cart load of watering cans and other contrivances the farmer has for spraying and its value to any farmer is really incalculable.

Baie du Vin, Que.
JAS. GRAHAM.

The Sprayer proves very satisfactory. I have loaned the machine in this locality, and all pronounce it a most excellent article.

Baie du Vin, Que.
JOSEPH B. WILLISTON.

Your Auto-Spray was just the clear thing for what I wanted. It did the work well, and the mustard is all dying. Some of it is all dried up now. It was not a good day for putting the stuff on as it was so windy, but I am certain that none of it will go to seed. I showed the sprayer to two or three and they thought they never saw such a good article before. I am sure they will sell well.

Credit Forks, Ont.
M. McDONALD.

I am much pleased to be able to say that the Auto-Spray is grand. Your agent whitewashed my horse stable and cow stable. It can't be beat as it does its work well.

Glendale, Ont.
J. JANLEY.

Your agent has shown to me the Auto-Spray and it works well and is an A 1 sprayer, the best I ever saw. I will do all I can to make sales for your agent.

Elginburg, Ont.
EDGAR TOLLES.

In regard to the Spray Pump sold me by your agent it is just the thing for the potato bugs.

Strasbourg, Ont.
ANTHONY WILHELM.

When to Spray and What to Use.

Every man should know what he is spraying for and employ means to attain the desired result. Be ready and begin early. It is easier to keep the enemy away than to drive him away. When fighting insects it is necessary to know if the pest chews its food for if not, contact insecticides or other means must be employed. Sucking insects as a rule, produce a wilting or discoloration of small areas and sometimes curling of the leaves; such attacks must be checked by the use of contact insecticides.

Biting or chewing insects devour portions of the plant and the poison, in order to be effective, must be applied where it will be eaten. If this is done early in the season, most excellent results may be obtained. g insects usually succumb much more quickly than older ones.

It must be remembered that insects and fungous diseases are of an entirely different nature. The two most important fungicides are Ammoniacal Carbonate of Copper and Bordeaux Mixture

APPLES—(Scab, Codling Moth, Bud Moth). 1st application: Spray before buds start, using copper sulphate solution. 2nd application: Just before blossoms open, bordeaux. For Bud Moth, Paris green when buds open. 3rd application: Within a week after blossoms have fallen, bordeaux and Paris green. 4th application: Eight to twelve days later, bordeaux. 5th application: Ten to fourteen days later, bordeaux.

CABBAGE—(Worm, Aphis). 1st application: When worms first appear, kerosene emulsion. 2nd application: Repeat in seven to ten days if plants are not heading. 3rd application: If worms reappear, repeat if not heading. 4th application: After heads form use Saltpetre for worms, a teaspoonful to a gallon of water. 5th application: When plants are small Paris green may be used to check worms.

CARNATION—(Rust and other fungous diseases, Red Spider). 1st application: When rust is first noticed, bordeaux. For Red Spider, kerosene emulsion. 2nd application: For rust, repeat first in ten to fourteen days. For Red Spider, repeat in three to four days. 3rd application: Repeat second, using ammoniacal carbonate of copper if plants are in bloom. 4th application: Repeat second if necessary.

CHERRY—(Rot, Aphis, Slug and Curculio). 1st application: As buds are breaking, bordeaux. When aphis appear, kerosene emulsion. 2nd application: When fruit has set, bordeaux. If slugs appear dust leaves with air-slacked lime. 3rd application: Ten to fourteen days later, if signs of rot appear, bordeaux. 4th application: Ten to fourteen days later, ammoniacal copper carbonate.

CURRENT—(Mildew, Worms). 1st application: At first sight of worms, Paris green. 2nd application: If worms reappear repeat. If leaves mildew, bordeaux. 3rd application: If worms still trouble, hellebore.

GOOSEBERRY—(Mildew, Worms). 1st application: When leaves expand, bordeaux. For worms, Paris green. 2nd application: Ten to fourteen days later, repeat. 3rd application: Ten to fourteen days later, ammoniacal copper carbonate. 4th application: Repeat in ten to fourteen days if necessary. 5th application: If mildew persists after crop is gathered, bordeaux.

GRAPE—(Fungous Diseases, Flea Beetle). 1st application: Before buds burst, copper sulphate solution. For flea beetle, Paris green. 2nd application: When leaves are half grown, bordeaux. Paris green for larvae of flea beetle. 3rd application: As soon as fruit has set, bordeaux. 4th application: Ten to fourteen days later if any disease appears, bordeaux. 5th application: If necessary, ammoniacal copper carbonate.

PEACH, APRICOT—1st application: Before buds swell, copper sulphate solution. 2nd application: As soon as the fruit has set, bordeaux. 3rd application: Ten to twelve days later, repeat. 4th application: When fruit is nearly grown, ammoniacal copper carbonate. 5th application: Repeat last if necessary in five to ten days.

PEAR—(Codling moth, Psylla Leaf Blight, Scab). 1st application: Before buds start, copper sulphate solution. 2nd application: Just before blossoms open, bordeaux. Kerosene emulsion for psylla when leaves open. 3rd application: After blossoms have fallen, bordeaux and Paris green. 4th application: Ten to twelve days later, repeat if necessary.

PLUM—(Rot, Fungous Growths, Curculio). 1st application: As buds start, copper sulphate solution. 2nd application: When fruit has set, bordeaux, Paris green. Begin to jar trees for curculio. 3rd application: Ten to twelve days later, repeat. 4th application: Ten to twenty-three days later, bordeaux, 5th application: Two to three weeks before plums ripen, bordeaux and ammoniacal copper carbonate.

POTATO—(Beetles, Blight). (Soak seed for scab in corrosive sublimate solution [2 oz. to 16 gals. of water] for 90 minutes 1st application: When beetles first appear, Paris green. 2nd application: When vines are two-thirds grown, bordeaux. Paris green for beetles if necessary. 3rd application: Ten to fifteen days later repeat if necessary. 4th application: Ten to fifteen days later, bordeaux if necessary.

RASPBERRY, BLACKBERRY—(Anthracnose, Rust). 1st application: Before buds break, copper sulphate solution. 2nd application: When new canes are one foot high, bordeaux mixture. 3rd application: During summer if rust appears, bordeaux. 4th application: After crop is gathered remove old canes and spray with bordeaux.

ROSE—(Mildew, Black Spot, Red Spider, Aphis). 1st application: Mildew, keep heating pipes painted with equal parts lime and sulphur mixed with water to a paste. 2nd application: Black spot, spray plants once a week with weak copper sulphate. 3rd application: Red Spider, kerosene emulsion to under side of foliage. 4th application: Aphis, kerosene emulsion. 5th application: Solution should be very dilute as rose foliage is easily injured.

STRAWBERRY—(Rust)—1st application: Just before blossoms open, bordeaux. 2nd application: As first fruits are setting bordeaux. 3rd application: When first fruits are ripening, ammoniacal copper carbonate. 4th application: When last of fruit harvested, bordeaux.

TOMATO—(Rot, Blight). 1st application: At first appearance of rot or blight, bordeaux. 2nd application: Repeat if diseases are not checked.

CATTLE—For Lice, Fleas, Ticks or Horn Fly use Kerosene emulsion.

Always Ready Fire Extinguisher.

With every machine we give a recipe for making a solution which will immediately extinguish fire as soon as applied. It does virtually the same work as the fluid applied by the high-priced chemical engines used in cities. A very little of the solution will extinguish a big fire, as by throwing it beneath the blaze the heat creates a gas and the fire cannot burn for want of air. Just mix the solution (it will keep for years), load your Automatic Sprayer and set it away. In case of fire just turn on the stream and the fire is out. It's as Good as an Insurance Policy, and Cheaper. Isn't This Worth Considering?

THE AUTO-SPRAY

(Patented in the United States and Canada.,)

A Self-Operating or Automatic Sprayer

You Hold the Hose and the Machine Does the Work.



Weight Empty 7 lbs.
Loaded 39 lbs.
Capacity about 4 gallons.
Extension Pipes Extra.

The Climax of all Sprayers; combines every conceivable point of excellence, including economy, durability, low price and ease in carrying and operating.

SIMPLICITY OF CONSTRUCTION.

Attention is called to the rigid handle, which serves for carrying the can and for plunger rod; also the air pump valve, which can be taken apart without moving a screw or fastening of any kind and in less than one second's time; and lastly to metal top of air pump, which may be attached readily and which cannot wear out as in the case of other structures held in position by tacks.

Nothing but Galvanized Steel and Solid Brass or Copper used, with 3-ply rubber hose—nothing to rust or corrode.

DIRECTIONS.

The above cut shows the air chamber and reservoir combined. Fill the reservoir not more than two-thirds full with the solution ready for spraying, insert the air pump at the end of the can, and all is ready for the operation. The sprayer being carried by the shoulder strap leaves both hands of the person operating nothing to do but direct the spray. The spray can be made to flow faster or slower by merely turning the cock of the spraying nozzle, and will throw either a cloud-like shower or a solid stream.

What This Automatic Sprayer Will Do.

A few strokes of plunger in air chamber will compress enough air to discharge the entire contents and make a continuous stream for nine minutes. This means that the sprayer can be charged in fifteen seconds, when it will work uninterruptedly long enough to spray a quarter-acre of potatoes.



WARRANTY.

We warrant our "Auto-Spray" to be perfect and to give satisfaction; and every defect in material or workmanship will be immediately corrected by replacing the part free of charge to the customer.

This offer is not made and could not be made for any other machine.

CHEAPNESS.

While the superior quality of all material used in the manufacture of the "Auto-Spray" makes it more expensive than some others, simplicity of the construction permits us to sell at lower prices than others who deal in inferior machines. The "Auto-Spray," quality considered, is by far cheaper than any other spraying device before the public.

